

REMARKS

Claims 1-17 are pending in the application. Reconsideration is respectfully requested.

Rejection under 35 USC 103

The claims stand rejected under 35 USC 103(a) over WO'502 in view of **Suzuki** (U.S. Patent 5,917,113). This rejection is respectfully traversed.

As to the applicability of the primary reference, the Examiner has notably agreed that **"WO '502 does not expressly teach that the centrifugal atomization process is carried out in an atmosphere with a relatively low (i.e., <4vol%) oxygen content....,"** (page 3 first paragraph of the Office action). To cure this deficiency of the primary reference (WO '502), the Examiner then relies upon secondary reference, Suzuki (US '113) asserting that Suzuki is directed to a process for producing spherical metal particles using centrifugally atomizing molten metal in an atmosphere containing 3-600 ppm oxygen (by weight). Hence, the Examiner surmises that the invention as a whole would have been obvious to one of ordinary skill in the art because the disclosure of '113 would motivate the artisan to conduct the centrifugal atomization of WO '502 in an atmosphere containing less than 4 vol% oxygen. These assertions of the Examiner are respectfully traversed.

First, it needs to be understood and recognized that the present invention deals specifically with obtaining atomized zinc alloy powder useable for alkaline batteries. This aspect of the invention is particularly significant and very important because, as is clearly noted in the widely known reference: "**Handbook of Batteries**," (McGraw-Hill, Second Edition, 1995) one of ordinary skill in the art would know that battery-grade zinc powder made by atomization should have a shape from **"potatoes" to "dog-bones"** (see a copy of the pertinent part of the Handbook attached hereto and

made a part hereof). In contrast, the process of the secondary reference ('113) yields smooth, spherical particles not suitable for use in alkaline batteries.

Furthermore, as early as 1999 (at the time priority to this application was filed), a patent application of one of the major producers of batteries: "Duracell" (copy of WO 99/07030, attached hereto and made a part hereof) noted the following (p. 8, l. 10-11 and 24-31): for gas atomized particles, and for centrifugally atomized particles, it is indicated to enhance the particle surface area (for reasons of efficient contact between the particles and the electrolyte) by producing particles with **extended, non-spherical shapes, such as flakes or acicular particles, as shown in Fig. 3 and 4 of WO 99/07030**. With this knowledge, one of ordinary skill in the art to which this invention belongs, will disregard US'113 as a document which in general teaches the use of centrifugal atomization for producing spherical metal particles, like Zn, having a smooth surface (see Examiner's concurrence on page 3 of the Office action), especially for use as components in pastes or paints and varnishes. Given such results, it is clear that the disclosure of US'113 will not lead to any success if applied to Zn powders for alkaline batteries, which requires, not smooth but a shape from "**potatoes**" to "**dog-bones**," as the widely known reference "**Handbook of Batteries**" has specified.

It is well settled that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. *In re Geiger* (CAFC 1987) 2 PQ2d 1276; *In re Fine* (CAFC 1988) 5 PQ2d 1596. In the instant case, if anything, the prior art (Suzuki) teaches away from its disclosure as clearly set forth above. Furthermore, merely because the references can be combined does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital* (CAFC 1984) USPQ 929. Additionally, both the suggestion to make the claimed composition or carry out the claimed process and the reasonable expectation of success must be founded in

the prior art, not in applicant's disclosure. *In re Vaeck* (CAFC 1991) 20 PQ2d 1438. In order for a combination of references to render an invention obvious, it must be obvious that their teachings can be combined. *In re Avery* (CCPA 1975) 186 USPQ 161.

If the well-settled holdings of the Courts have any validity, to establish a *prima facie* case of obviousness: (a) there must be some suggestion or motivation to combine the reference teachings, (b) there must be (in so doing) a reasonable expectation of success, and (c) the prior art references must teach or suggest all the claim limitations. When viewed in this light, one readily notes that US'113 does not deal with Zn powders of the shapes and characteristics required for alkaline batteries, since the teachings in US'113 providing for smooth, spherical particles are totally contradictory to what one of ordinary skill in the art knows or should know about battery-grade Zn powders well described in such authoritative work as "**Handbook of Batteries**" (requiring a shape from "**potatoes**" to "**dog-bones**"). Thus, combining WO'512 with US'113 can only be based on impermissible and unallowable hindsight.

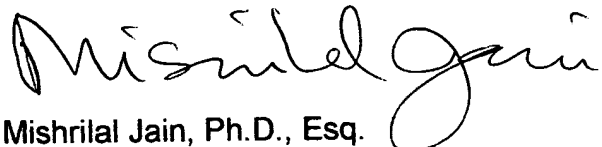
In light of the above, the outstanding rejection under 35 USC 103(a) over WO'502 in view of US'113 is unsustainable, and this rejection should be withdrawn.

The claims are now believed to be in condition for allowance and favorable action accordingly is earnestly solicited. Should there remain any outstanding issues, a telephone interview with the Examiner to discuss the same toward furthering the application for allowance is respectfully requested.

11620 Masters Run
Ellicott City, MD. 21042
Tel. 410-715-4514

February 13, 2007

Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'Mishrilal Jain', written in black ink.

Mishrilal Jain, Ph.D., Esq.
Reg. No. 29315

commence at 3 p.m.! The dining room got full with the friends who arrived on time and as soon as Meira came in with Lily as planned at 3:10 p.m., the crowd cheered: "Happy Birthday to you! Happy Birthday to you! Happy birthday, dear Lily, Happy Birthday to you!" as Lily blew the candle on the chocolate cake amid loud applause! Then, at that moment Professor Watson came forward from behind and hugged Lily wishing her many happy returns of the day! Lily was surprised and overwhelmed seeing Professor Watson at the party and unable to hold back her joyous tears, she tried to smile looking into Dr. Watson's gentle loving eyes!

Lily then cut the cake and Samir passed it around. Everybody was happy and enjoying the party, congratulating Lily and assuring her that they will pitch in and make her parliamentary campaign a grand success! Lily felt very happy at the affection and support she was receiving.

After a little while when everyone have had something to eat, Meira requested Ibrahim Suleman, an accomplished comic and lecturer in the Department of

Drama & Theatrics at the University, to tell some of his politically incorrect jokes which were particularly funny because of his deliberate Arab accent, keeping in mind, Meira reminded Ibrahim, that Lily was now a political candidate, although of a different kind!

Ibrahim's jokes made everybody turn over with laughter and people thoroughly enjoyed his banter, puns and skits!

And after a lot of fun, felicitations and merry making, the party concluded.

Everyone had a great time and Lily thanked everyone for coming and joining in the fun.

□